

Anti-SYT2 antibody [ZNP-1] ab154035

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Overview

Product name	Anti-SYT2 antibody [ZNP-1]
Description	Mouse monoclonal [ZNP-1] to SYT2
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human, Zebrafish Does not react with: Cow
Immunogen	Tissue, cells or virus. This information is considered to be commercially sensitive.
Positive control	Human, Rat, Mouse and Zebrafish Brain Homogenate Lysate; SH-SY5Y cells. IHC-P: Mouse and rat cerebellum tissue.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: Human serum albumin
Purity	IgG fraction
Purification notes	Near homogeneity as judged by SDS-PAGE. ab154035 was produced in vitro using hybridomas grown in serum-free medium, and then concentrated by chemical fractionation.

Clonality	Monoclonal
Clone number	ZNP-1
Isotype	IgG2a

Applications

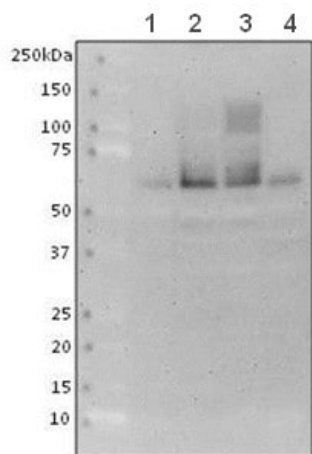
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab154035 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 48 kDa.
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		1/4000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse. It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone.
Sequence similarities	Belongs to the synaptotagmin family. Contains 2 C2 domains.
Domain	The first C2 domain mediates Ca(2+)-dependent phospholipid binding. The second C2 domain mediates interaction with Stonin 2.
Cellular localization	Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Cytoplasmic vesicle > secretory vesicle > chromaffin granule membrane. Synaptic vesicles and chromaffin granules.

Images



Western blot - Anti-SYT2 antibody [ZNP-1]
(ab154035)

All lanes : Anti-SYT2 antibody [ZNP-1] (ab154035) at 1 µg/ml

Lane 1 : Human brain tissue lysate - total protein ([ab29466](#))

Lane 2 : Rat Brain Homogenate Lysate

Lane 3 : Mouse Brain Homogenate Lysate

Lane 4 : Zebrafish Brain Homogenate Lysate

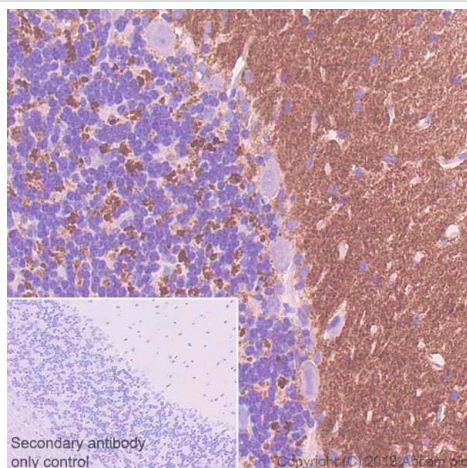
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG – HRP at 1/1000 dilution

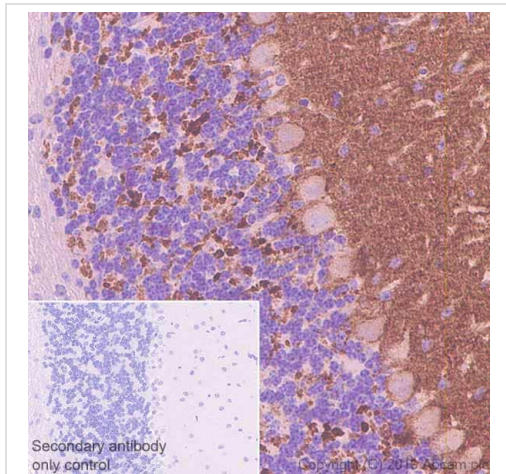
Predicted band size: 48 kDa

Observed band size: 65 kDa



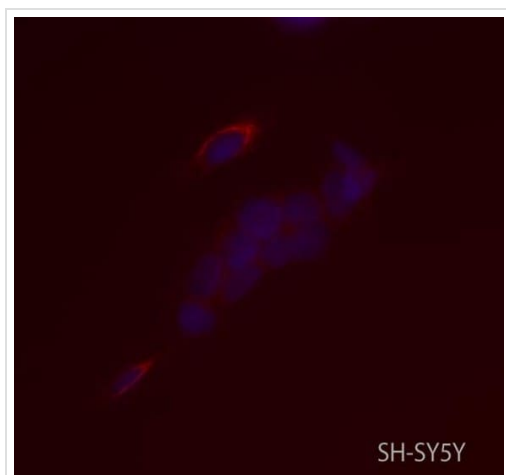
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SYT2 antibody [ZNP-1]
(ab154035)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebellum tissue sections labeling SYT2 with purified ab154035 at 1/4000 dilution (0.25 µg/mL). Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 minutes. Leica mouse (DS9800) was used as the secondary antibody. Negative control: secondary antibody only control. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SYT2 antibody [ZNP-1] (ab154035)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebellum tissue sections labeling SYT2 with purified ab154035 at 1/4000 dilution (0.25 µg/mL). Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 minutes. Leica mouse (DS9800) was used as the secondary antibody. Negative control: secondary antibody only control. Hematoxylin was used as a counterstain.



Immunocytochemistry/ Immunofluorescence - Anti-SYT2 antibody [ZNP-1] (ab154035)

Immunocytochemistry with SH-SY5Y cells stained with Anti-SYT2 antibody (ab154035) in red and DAPI in blue, as a counter stain. The target protein locates to the plasma membrane (red).

Fixation: 4% Paraformaldehyde, 20 min.

Permeabilization: 0.1% Triton X-100, 10min.

Blocking: 10% Goat Serum/PBS, 1 hour.

Primary: Anti-SYT2 antibody (ab154035) 5 µg/ml in 10% Goat Serum/PBS, 2hr at room temperature or over night at 4°C.

Secondary: Alexa Fluor® 594 Goat Anti-Mouse (H&L) used at a 1/1000 dilution in 10% Goat Serum/PBS, 1hr at RT.

Washing: 3x 1% Goat Serum/PBS, 10 mins/wash

DAPI: 2 µM in 1% Goat Serum/PBS, 10 mins

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